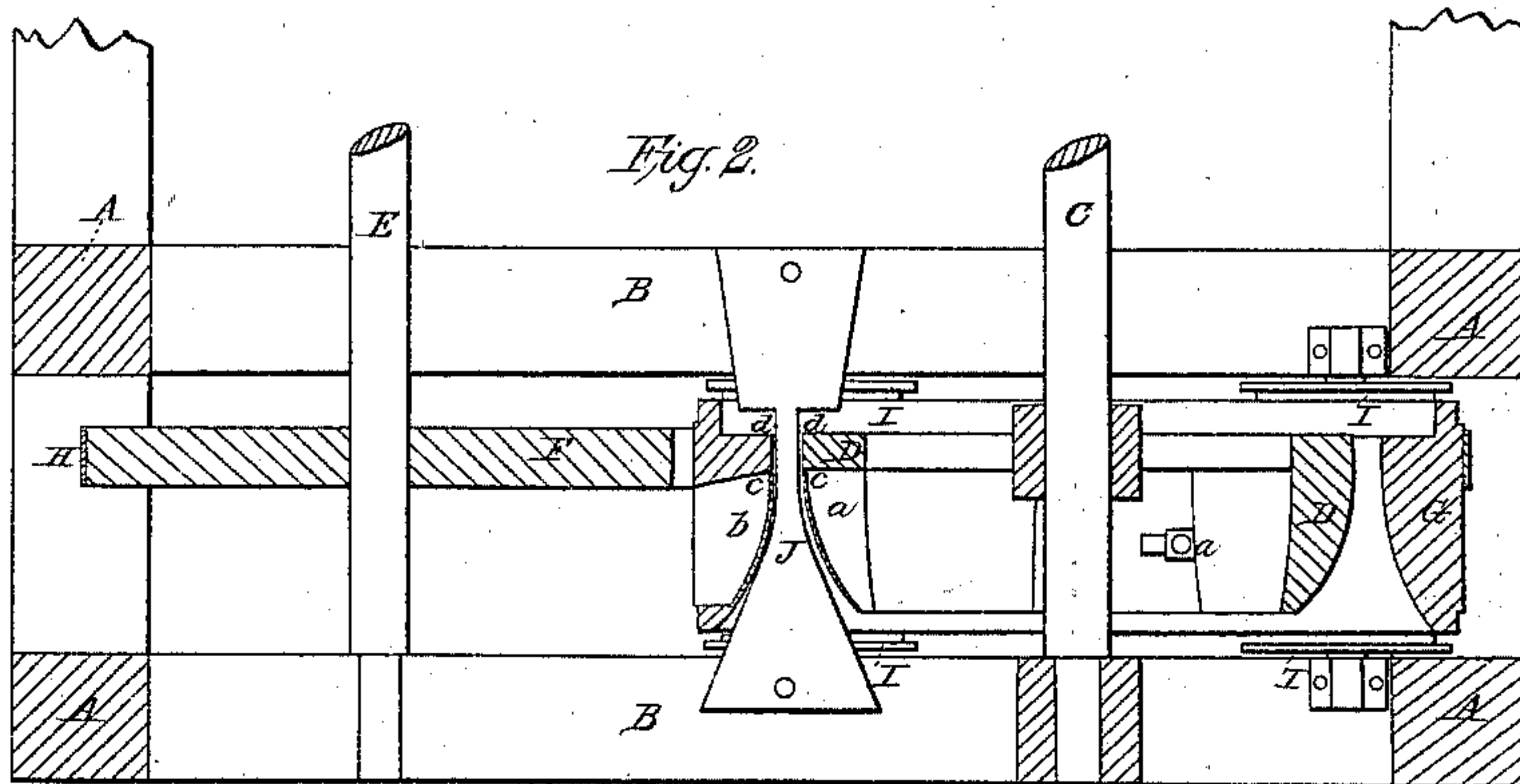
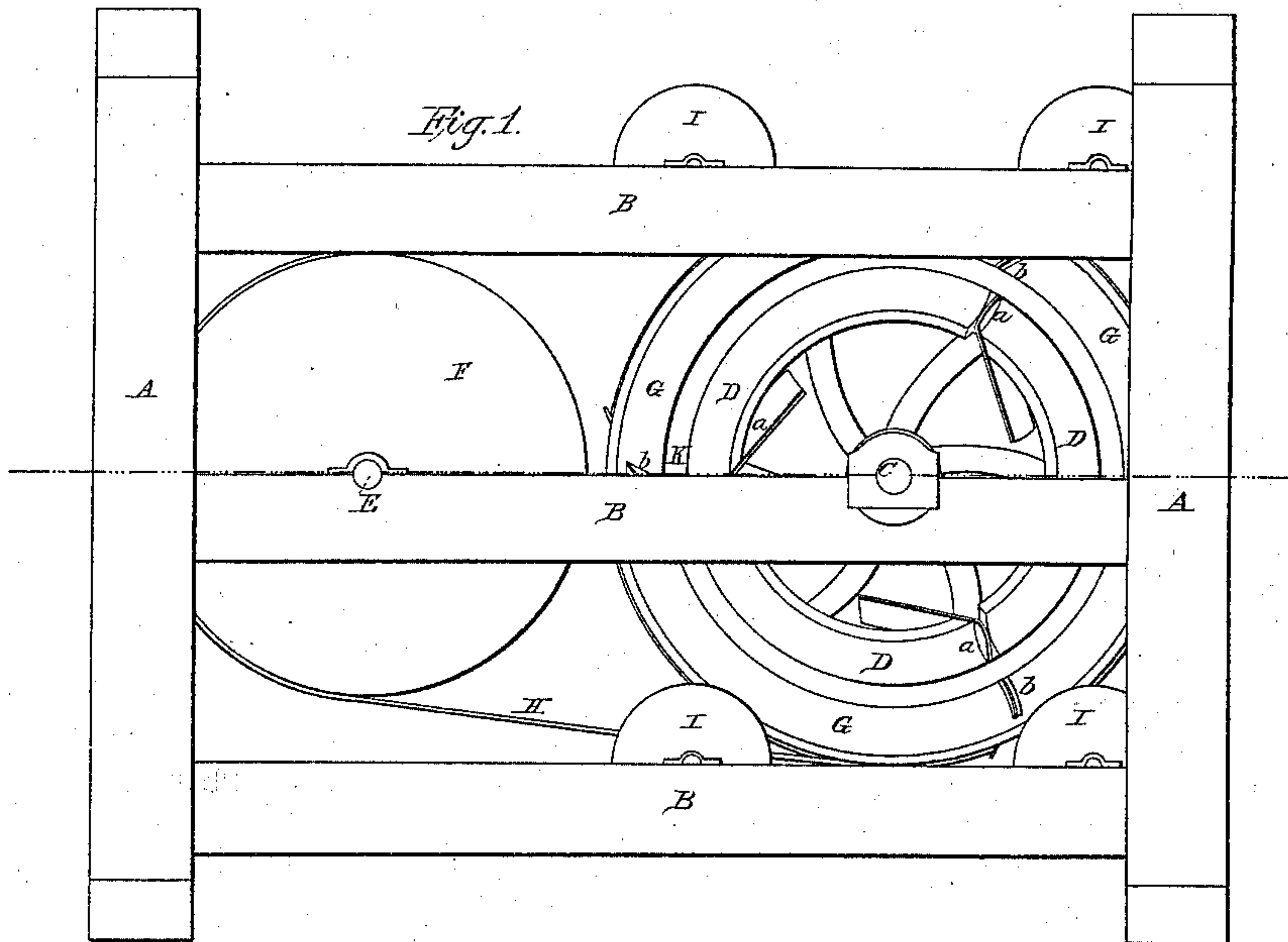


C. Hobson,

Dressing Staves,

No 10,988,

Patented May 30, 1854.



Witnesses.
A. B. Straighton
Sam. G. Hull

Inventor
Carmi Hobson

UNITED STATES PATENT OFFICE.

CARMI HOBSON, OF HANNIBAL, MISSOURI.

IMPROVED STAVE-MACHINE.

Specification forming part of Letters Patent No. 10,988, dated May 30, 1854.

To all whom it may concern:

Be it known that I, CARMI HOBSON, of Hannibal, in the county of Marion and State of Missouri, have made certain new and useful Improvements in Machines for Dressing Staves; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1 represents a view from the front or that end of the machine into which the staves to be dressed are fed in, and Fig. 2 represents a horizontal section taken through the machine at the red line *x x* of Fig. 1.

Similar letters in both figures refer to like parts.

The nature of my invention consists in the combination of the rim and wheel, both provided with suitable cutters and concentrically arranged about the same axis, and these in combination with a fixed rest, so that by passing the stave through between the inner periphery of the rim and the outer periphery of the wheel, both running in the same direction, the stave shall be dressed on both sides by a simultaneous operation and without the use of auxiliary guides, yielding rollers, or other appliances than the said rim, wheel, and rest.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the upright and B the horizontal timbers of the frame, which may be constructed in any well-known substantial manner.

The power to drive the machine may be communicated from any first mover through the shaft C, which is supported in proper bearings in the longitudinal pieces B, and upon which said shaft is placed the cutting-wheel D, provided with any convenient number of knives *a a a*, the particular shape of the cutting-edges of which knives is more distinctly seen at *a*, Fig. 2, and are for dressing the inside of the stave. Another shaft E, parallel with that C, is placed on the horizontal timbers B, which shaft may receive its motion from the shaft C by means of pulleys and a belt, in a manner well known to

mechanicians, and which need not here be described or represented; and on this shaft E is placed a pulley F, around which and the rim G passes an endless belt H, for the purpose of communicating motion to said rim, it running in the same direction and at about the same velocity with the wheel D. The rim G has no center to turn upon, but is supported in place by four friction rollers or pulleys I I I I on each side of it, there being a suitable slight recess cut on each edge of the periphery to cause it to run true on said pulleys. The rim G is also provided with a convenient number of knives *b*, for dressing the outside of the stave, the particular form of which may be more distinctly seen at *b* in Fig. 2.

J in Fig. 2 represents the fixed rest upon which the stave is slid through between the wheel and rim. This rest is firmly secured to the horizontal timbers B B and holds the stave while it is being acted upon by both the sets of cutters in the rim and wheel.

In Fig. 1, K represents the space between the wheel and rim, through which the stave is forced by the hand as far as convenient, the next stave pushing it clear through; and different-sized staves are dressed in the same machine by throwing the wheel toward or from the rim at the point where the staves are fed in, and for this purpose the wheel and rim must be adjustable in relation to each other. By reference to Fig. 2 it will be perceived that however thick or winding the stave may be the curve of the cutters will catch it gradually, while by the large opening, into which it is at first fed, it may be turned to one side or the other, as the stave may wind to one side or the other. The stave cannot pass through any faster than the excess of material is cut off from the stave by the cutters. The cutters terminate at *c c*, Fig. 2, and beyond that point and to *d d* the inner periphery of the rim G and the outer periphery of the wheel D serve as guides to hold up and steady the stave, so that it may be evenly operated upon on both sides. The stave is fed through between the rim and wheel parallel with their shafts as nearly as the natural shape of the stave will admit, and by the simple wheel, rim, and rest I make a perfect and rapidly-operating machine which

has all the elements necessary for feeding in, resisting the action of the cutters, and guiding and controlling the stave in its passage through the machine, and dispensing with many of the separate appliances for accomplishing this purpose.

Having thus fully described the nature of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

The combination of the cutting-rim and

wheel hung in the same vertical plane, with the fixed rest passing between their cutting-surfaces for the purpose of holding and controlling the stave while it is being dressed on both sides, substantially as described.

CARMI HOBSON.

Witnesses:

A. B. STOUGHTON,
SAML. GRUBB.